



CAUTION
HAZARDOUS VOLTAGE FROM ONE OR MORE SOURCES
Turn off all voltage sources before touching any components.
Electrical shock or death will cause severe injury or result.

NOTICE
FOR SERVICE ON THIS CONTROL
Contact Your Machine Dealer Or
ENTRON CONTROLS INC.
DIRECTLY: (630) 682-9800
485 EAST RANDY ROAD
CAROL STREAM, IL 60188
FAX # (630) 682-3374

CAUTION
Control Shipped Wired for 460 VAC Operation unless otherwise specified - See Note 2.

421415 B

| QTY. | DESIG. | PART NO. | DESCRIPTION |
|------|----------|------------|---|
| 1 | 0 | 600648 | Assem., Dial Plate, EN1380, Consisting of: |
| 1 | 0 | 600648-001 | Assem., Dial Plate, w/key Switch, EN1380, Consisting of: |
| 1 | 0 | 600647 | Assem., Switch, Sequence Control & Display Board |
| 1 | 0 | 600531-001 | Assem., Switch, Keylock, Momentary, SPST |
| 1 | 1 | 540293 | Illustrated Panel, Dial Plate, EN1380 |
| 1 | 1 | 515104 | Panel, Display Window, Red Filter, EN1380 |
| 1 | 1 | 565003 | Hole Plug, 3/4" Diam., Black |
| 1 | 1 | 565013 | Hole Plug, 3/8" Diam., Black, (For Rotary Board Hole) |
| # | PCB11 | 410350 | Optional Assem., PCB, Rotary Input Board |
| # | J4-J4 | 319008 | Knob, Skirted, w/o Indicator, Black |
| # | J4-J4 | 322447 | Assem., Harness, Seq. Ctrl Bd. to Rotary Input Bd., 7" Long |
| 1 | PWR. LT. | 305001 | Lamp, Neon, Red, 230V |
| 1 | M.D. LT. | 305002 | Lamp, Neon, Clear, 230V |
| 1 | J2-J2 | 322303 | Assem., Harness, Seq. Ctrl Bd. to Terminal Strip Board |
| 1 | J3 | 322327 | Assem., Harness, Power, EN1380 |

PARTS LIST - CONTACTOR SECTION

| QUANTITY | DESIG. | PART NO. | DESCRIPTION |
|----------|--------|-----------------|---|
| 1 | 1 | TS1 | Terminal Strip, 10 Pin, (Part of J3 Harness) |
| 1 | 1 | TS8 | Terminal Strip, 2 Pin, (Part of Contactor Assem.) |
| 1 | 1 | TS6 | Terminal Strip, 4 Pin, (For TLS/WFS) (SHIPPED LOOSE) |
| 2 | 2 | R70, T1 | Resistor, Power, Surge, 500 Ohm, 10W, (For 575V) |
| 1 | 1 | R74 | Assem., Resistor, Power, 2000 Ohm, 10W, (For 575V) |
| 1 | 1 | 310001 | Transformer, Control, (Part of J3 Harness) |
| 1 | 1 | T2 | Transformer, Sense, (Part of J3 Harness) |
| 1 | 1 | T3 | Transformer, Valve, 150 VA |
| 1 | 1 | T3 | Transformer, Valve, 150 VA, 575V |
| 1 | 1 | F1 | Fuseholder, 1 Pole, Mini, 600V |
| 1 | 1 | F1 | Fuse, Control, 1/4A, FNO-R-1/4 or KLD-R-1/4 |
| 3 | 3 | 307022 | Fuse, 1 Amp, Slow Blow, 2AG, (Part of 410319) |
| 3 | 3 | F6, 7, 8 (PCB2) | Assem., Wire, Surge Resistor, 18 Ga., Black |
| 2 | 2 | 325024 | Assem., Wire, Surge Resistor, 22 Ga., Black |
| 2 | 2 | 325149 | Assem., Wire, Valve Transformer, 22 Ga., Black |
| 1 | 1 | 600520 | Assem., Contactor, Thyristor, Air, 300A, 460/575V, w/TLS |
| 1 | 1 | 600669 | Assem., Contactor, Thyristor, Water, 600A, 460/575V |
| 1 | 1 | 600670 | Assem., Contactor, Thyristor, Water, 1200A, 460/575V |
| 1 | 1 | 600533-005 | Assem., Contactor, SCR, Water, 1900A, 460/575V, w/TLS |
| 1 | 1 | 600533-003 | Assem., Contactor, SCR, Water, 2200A, 460/575V, w/TLS |
| 1 | 1 | 346004 | Lug, Screw, 5/16" Bolt to 2/0 Wire, 600A Contactor, L1 & H1 |
| 1 | 1 | 346002 | Lug, Screw, 5/16" Bolt to 4/0 Wire, 1200A Cont., L1 & H1 |
| 1 | 1 | PCB2 | Assem., PCB, Terminal Strip Board, EN1380 |
| 1 | 1 | 346004 | Lug, Screw, Chassis GND, 2/0 Wire |
| 1 | 1 | 525136 | Bracket, Mounting, 1800/2200A Contactors |
| 1 | 1 | 525255 | Bracket, Mounting, 300/600/1200A Contactors |
| 1 | 1 | 510236 | Plate, Mounting, Terminal Strip Board |
| 1 | 1 | 300020 | Switch, Temp. Limit, (R.C.), (Part of 300/1800/2200A Cont.) |
| 1 | 1 | 900045 | Hose, 3/8" ID |
| 1 | 1 | 566010 | Hose Clamp, 3/8" Hose |
| 1 | 1 | 600179 | Assem., Water Fitting, 3/8" Hose |
| 1 | 1 | 600297 | Assem., Water Flow Switch, 3/8" Hose, (SHIPPED LOOSE) |
| 1 | 1 | IDS | Assem., Interlocking Door Solenoid |
| 1 | 1 | 314001 | Coil Assem. Only, IDS |
| 1 | 1 | 510238 | Cabinet, Control Style "E" |
| 1 | 1 | 510241 | Door, Cabinet, Style "E" |
| 1 | 1 | 700163 | Manual, EN1380 |
| 1 | 1 | 421383 | Logic Diagram, EN1380 Control |
| 1 | 1 | 421415 | Wiring Diagram, EN1380-Series, "E" Cabinet |

Optional Keylock when specified by customer. See Note 8. Pack Key in Poly Bag 900148 & attach to Door w/Yellow Tape 900119.

X Optional when specified by customer. See Notes 4 & 9.

* Substitution or addition of parts when 575V control is specified.

Optional Water Flow Switch (WFS) Assembly when specified by customer. When WFS is specified, add quantity one (1) Terminal Strip TS6, WFS & T56 are customer installed. WFS & T56 are shipped loose. See Notes 4 & 9.

Optional. Add quantity one (1) PCB11 Rotary Input Board when specified by customer. Remove Hole Plug P/N 565013 when PCB11 is optional. Supply quantity one (1) each of J4-J4 Harness Assembly & Knob when optional PCB11 is specified. See Drawing #440449 for Customer Mounting & Knockout Detail "E" Cabinet.

MANUFACTURING INSTRUCTIONS:
See Drawing #440445 for Packing Instructions "E" Cabinet.
See Drawing #440448 for Label Locations "E" Cabinet.
SEE DRAWING #600550, #600550-001, #600550-002, or #600550-003 FOR MECHANICAL ASSEMBLY INSTRUCTIONS.

| REV | AUTH | DESCRIPTION | DATE | CHK'D BY | DATE | APPROVED BY | DATE |
|-----|------|------------------|------|----------|------|-------------|------|
| 1 | | ORIGINAL RELEASE | | | | | |
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SCALE DATE: 12-21-99
DRAWN BY: DC
CHK'D BY: DEC
DATE: 12-21-99

TOLERANCE UNLESS SPECIFIED: REVISED

ANGLES: ± 1°
DECIMALS: ± 0.010
FRACTIONS: ± 1/64
DATE: 1-24-02 DEC

WIRING DIAGRAM, EN1380-SERIES, "E" CABINET

| REV | AUTH | DESCRIPTION | DATE | CHK'D BY | DATE | APPROVED BY | DATE |
|-----|------|--------------|------|----------|------|-------------|------|
| 1 | | EN1380-300E | | | | | |
| 2 | | EN1380-600E | | | | | |
| 3 | | EN1380-1200E | | | | | |
| 4 | | EN1380-1800E | | | | | |
| 5 | | EN1380-2200E | | | | | |

NEXT ASSM/USED ON: 421415-
DRAWING NUMBER: 421415-
REV: B